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OSSEOUS DEVELOPMENT AND NUTRITION, LESIONS THEREOF, WITH SOME SUGGESTIONS FOR THEIR MORE PERFECT CORRECTION.

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As a knowledge of the materials and normal processes, or those from and by which nature originally constructs parts and organisms, is absolutely essential to the perfect comprehension of those deviations from the natural or healthy standard, which are so frequently occurring in the process of development, nutrition, and restoration of the tissues of the individuals of the animate world; and particularly, in consequence of their greater complexity, in that higher class of them, the animal, and man especially, and circumstances having directed my attention more particularly to one of these latter, viz., the osseous structure, I have been thus led, from a general consideration of its anatomical and physiological characteristics, its pathological aberrations, and the therapeutical measures usually employed for their rectification, to the conclusion that there are certain indispensable points and fundamental principles, generally overlooked or entirely neglected, in the endeavor to thus modify and correct such. And as it is desirable that all things promising in the least to the more successful accomplishment of these objects should be known, and believing it to be the duty of every man to present such things as may seem to him correct and practically useful; I have therefore concluded to place the few subjoined ideas upon the subject before the profession in their present crude form, especially as individual opportunities for testing practically, and sufficiently extensively, any particular views which may be ascertained, are comparatively limited. By the experience and observation, however, of many persons, a mass of testimony may be collected in a comparatively short space of time, sufficient either to demonstrate more fully the truth, and prove the value, or exhibit more clearly the deficiencies, of any peculiar views or practice advanced, which could not possibly be acquired or collected from personal observation and experience in the life time of a single individual; and hence, in consequence of individual opportunities being thus necessarily limited, the more frequent adoption of the course herein attempted of reasoning from known facts and principles, and endeavoring to deduce therefrom other principles practically applicable, would, it

is believed, not only more rapidly advance the interests of science generally, but more speedily and permanently secure the means essential to the prevention and correction of those numerous and frequently dangerous derangements incident to this existence; some of those to be subsequently noticed being so exceedingly difficult to successfully remedy, as to defy all the present known methods of treatment. Therefore, as the more positive accomplishment of such objects still remains a desideratum of the highest importance, it is hoped that the desire to assist in supplying this will be considered an ample apology for the presentation of the following crude observations.

For the more perfect comprehension, therefore, of the peculiar organic deficiencies upon which the failures and deviations of the constructive, nutritive and restorative osseous processes depend, and the circumstances which often interfere with their regularity or entirely check and control them, it will be proper briefly to consider, first, the mode by which the osseous tissue is originally constructed; secondly, that by which it is nourished; and, thirdly, that by which it is restored. In the construction of this tissue there are, as is well known, three distinct stages, viz., first, the mucous or pulpy; second, the cartilaginous; and, third, the osseous. In the progress of the mutations essential to the perfection of the respective processes of conversion, the regularity and co-ordination of the stages, and finally the completion of the ossific structure, there are certain indispensable conditions and requirements necessary, and phenomena presented, a correct appreciation of which will doubtless afford an insight, and a knowledge of the causes of the imperfections and failures of the organizable and conservative efforts, and thus assist in pointing out the deficiencies of the present means and modes employed for correcting such aberrations, thereby disclosing more positively the measures to be adopted for the successful induction of the now too often inefficient, and abortive normal action.

For the perfection of this, as well as all other organic processes, and their incidental or necessary mutations, it is evident that there must be, first, material, possessing peculiar properties; second, power to act on it; third, stimulus or sustenance for the excitation and support of this power, &c.; or, to resort to and continue the analogy of Dr. Ira Warren, which, by-the-by, is one that, in conversation, I have often drawn when illustrating the functions of organic and animal life, their differences, mutual relations and dependencies, viz., there is, and must be, first, the material or crude matter, in the form of earth or food, composed of certain elements and possessing peculiar properties rendering them susceptible of certain modifications; these are prepared and worked up by the makers* on the one hand, and the nutritive organs on the other. Second, for these purposes it is necessary to presuppose the previous existence of these forces to mould and modify such materials into proper forms or states for further changes and more ultimate purposes. Third, the conveyance of such prepared material to its proper destination, or the point requiring construction or repair, by the usual physical modes on the one side, and the more immediately vital or physico-vital

* Brick-makers.

on the other, through the absorbents, general circulation and capillaries; the greater tendency or flow, according to the exigencies of the case, being concentrated for that purpose. Fourth, the construction of the edifice, tissue or organism, in the appropriation and deposition of these materials, by the layers or cells. Fifth, the stimulating and sustaining power or force, by the usual physical and vital stimuli, and sometimes, when these efforts or processes become languid or inefficient from physical or vital inability, or otherwise, requiring augmentation, it is necessary to arouse and excite more efficient and additional effort by increased inducements or direct stimuli and improvement of the general vital energies, with greater concentration of material and action.

The more minute shades of resemblance between these physical and organic processes will be readily traced, the general outline being sufficient for our present purposes.

All of these minor processes are of course subservient to the accomplishment of the plan or projection of the original architect or designer, to a certain extent under the control or influence of the superintendent, or nervous system and vital force, which direct more especially the concentration and proportion of material and force required. In vegetables, however, in which there is no nervous system, construction and restoration are effected, also, through these physico-vital agencies and cell action, directly under the influence of the vis vitæ, according to the impulse and laws given and instituted by the great originator and designer.

This simile is merely brought forward to exhibit more conclusively the pertinency of the following observations; and though the subject which it is intended to illustrate is somewhat trite, yet it is believed that the principles therein indicated, notwithstanding their full acknowledgment and recognition, are not extended sufficiently in their general application to the treatment of deranged organic action.

But, in continuation of the more special consideration of our subject, we will now cursorily glance at normal nutrition, leaving that of restoration for a subsequent period. In this the materials for nutrient purposes, and those for the completion of undeveloped tissues, are generally very abundant, the waste being greatly disproportionate to the supply, there being also a due proportion between the quantity of the animal and earthy matters respectively, according to the requirements and exigencies of the particular period of life, varying, as the demand for the greater or less proportion of one or the other preponderates. Thus it is well known, that in infancy the former is in proportionate greater abundance, not only for the more perfect extension and growth of the bones, by furnishing a plasma or bed into which the latter may be deposited, but also to supply the necessarily-increased demand for general nutrition and growth. As the osseous structure advances, however, towards completion, there is a more decided approximation, and closer equality, between its components and the supply and waste; and subsequently, as age increases, the excess of the calcareous matter gradually becomes proportionately greater; and in old age, in consequence of this abundance of the inorganic constituents, the bones become more consolidated and brittle, and necessarily more liable to fracture, because

they are not only deprived, to a certain extent, of the inter-cellular tissue, but also of the lubricating and nutrient oleaginous and gelatinous principles with which they have been so abundantly saturated and supplied.

These superficial and cursory notices of the normal mutations, are intended as a slight retrospect to enable us to arrive at a more definite comprehension of the deficiencies and derangements upon which the failures of the constructive, nutritive and restorative processes of the osseous structure depend; therefore it will now be in order and requisite, first, to consider these deficiencies and derangements, their character and complications; and, second, to endeavor to deduce therefrom the principles upon which they should be treated to prove successful.

To determine these more positively, it is obviously requisite to inquire into that general diathesis and special deficiencies of system, and peculiar circumstances, influencing the inception and regulating the intensity of the aberration from the normal standard.

The general diathesis is that in which the original physical conformation is imperfect or feeble, and the organic functions necessarily slow and of a low grade; or an acquired cachexia, with a depravation of the higher qualities of the fluids, tissues, &c.

The special deficiencies may be stated in the following propositions; viz., first, there may be an insufficiency of plasma to supply the material for the mucous or pulpy deposition, out of which the cartilaginous structure is to be formed, and in which the osseous matter is to be deposited. Second, an abundance of the plasmatic material and deposit, but a failure of the cartilaginous change or modification, or privation of the second stage. Third, sufficiency of both the organic and inorganic materials, and perfection of the cartilaginous conversion, but a failure of calcareous deposition in the receptacle thus provided; or arrest in the second stage. Fourth, cartilaginization perfect, but an insufficiency of calcareous matter; or privation of the final stage of ossification. Fifth, an insufficiency of both plasmatic and calcareous matter, hence imperfect effort at osseous organization, and consequently defective structure. Sixth, sufficiency of both plasma and lime, but unequal general distribution and power of appropriation, from irregular or depraved organic action, hence failure of construction of some general part of the system. Seventh, inefficient or irregular local capillary and cell action for the appropriation and deposition of these materials, thus causing circumscribed or limited deformities—as spina bifida, fissure of the palate, &c.

In addition, there may be irregularity, or the forcible arrest of the normal constructive and nutritive processes from the intercurrence of some general or local complicatory affection, such as fevers, scurvy, inflammation, &c.; or undue consumption, destruction, or absorption of either or both components during or after organization, from excessive, degenerate or depraved vital action, thus modifying the osseous structure and producing or resulting in such diseases as rachitis, malacosteon, fragilitas ossium, &c.

Therefore, if these propositions be considered as explanatory of the true state of things in the aberration of these processes, the indications

thus afforded for treatment are obvious; viz., first, to supply the necessary material according to the deficiencies and requirements of the case; second, the improvement of the general nutritive functions and vital energies, thereby promoting more effectually the equable distribution and appropriation of the requisite material; third, the induction of the local circulatory and nervous afflux and excitation of cell action for the concentration of the deficient animal and earthy matters and the completion of the ossific structure, as in spina bifida, &c.; fourth, the prevention, modification and rectification of abnormal deviations and intercurrent affections.

As the evidences of the deficiencies of the system are only palpably exhibited after birth, the treatment therefore must necessarily be instituted accordingly and subsequently to that period. In the natural state, it is well known that the lacteal secretion contains all the organic and inorganic principles essential to the growth and nutrition of the tissues and organs of the new being. In numerous instances, however, the child is not only badly organized in the first place to commence its existence, but the maternal fluid for its subsequent nourishment and increase is also imperfect, by the deprivation of several of its most important elements; hence this congenital condition, which might have been to a certain extent corrected, thus becomes more strongly confirmed, and the child is necessarily subjected to those manifold evils attendant on, and connected with, such a diathesis and inefficient sustenance.

The general appearance of the infant more readily exhibits the deficiencies of the nitrogenous or organic principles than those of the inorganic, which are very frequently insufficient, yet the absence of the latter from the system may be discovered by a close scrutiny of the osseous system, and especially of those more external points usually prominent and indicative of the state of the internal and general development, viz., the cranial fontanels, though where suspicion has been excited analysis of the food will be positively demonstrative. Generally, however, the deficiencies of the earthy materials are not so evident to the senses until the child has arrived at that period in which dentition ordinarily occurs, and then if the eruption of the teeth should be very tardy, or when they do appear are imperfect in their structure, such evidences, especially if conjoined with others, are almost positive in favor of the privation of the inorganic elements, not only of these organs, but of the general economy.

If these evidences, however, should not be sufficiently distinctive or be entirely absent, which they may be from the irregular distribution and appropriation of the materials, others, though more obscure, would be displayed in the progressive development of the general osseous structure, indicated generally by the degree of activity and perfection of the instinctive prehensile and locomotive efforts peculiar to all children, though the failure of these also may be dependent on general debility, therefore are not so positive in their character as the former. Again, as age progresses through and past the period of first dentition and proceeds to that of the second, and during the whole period of this latter, which occupies a considerable part of the time and is coincident with the con-

tinuous development of the osseous tissue, additional external ocular and palpable signs are thus regularly presented, directly indicative of the condition and progress of the general osseous structure ; and if those more obscure ones peculiar to its deficiencies are also manifested, the evidence becomes highly conclusive. The condition of the texture of the teeth has, however, been so fully recognized and acknowledged as indicative of the state of the general health at the different periods n which they were developed and erupted, that its co-existing condition at such periods has been confidently predicated on the indications thus afforded by their appearance in after life, yet I am not aware that this has ever been specially considered as directly indicative of the co-existing state of the osseous system.

By a careful observation, therefore, of the local and general signs thus presented, highly useful information may be obtained respecting the development and nutrition of these concealed organic pillars and buttresses, upon and to which the other tissues and organs are so admirably suspended and so firmly attached, and thus the condition of this hidden structure and the progress which it is making in the different periods of life towards its final completion, may, *cæteris paribus*, be ascertained with great certainty.

For the more successful fulfilment of the indications, therefore, it is first requisite to ascertain the peculiar deficiencies, and in the one more particularly considered, in which there is a greater absence of the inorganic elements of the osseous structure, the principal constituent of which is phosphate of lime ; this latter should be given accordingly, and in connection with the usual albuminous and oleaginous ingredients of the food ; and if necessary, those corroborant measures ordinarily so efficient in improving the vital energies, might generally be sufficient for all practical purposes.

In those cases of imperfect or abortive local development, as fissure of the palate, spina bifida, &c., the completion or union might, it is believed, be generally effected, without the aid of the usual harsh operations, by the excitation and prolonged continuation around and therein of moderate irritation, thereby inviting an afflux of blood and nervous energy to the part sufficient to cause plasmatic effusion and increased cell activity for the construction of the cartilaginous base, administering at the same time the phosphate of lime for the promotion of the ultimate organization ; and if the general system should be in that state in which plasma could not readily and properly be supplied, preceding or in conjunction with it those substances which produce and increase this organizable principle would be necessary. There is very little doubt that this course would frequently be favorable, as it is directly in accordance with the principles upon which all treatment heretofore adopted has been successful, in which the general treatment has apparently been entirely neglected, thus necessarily assuming that sufficient material already existed in the system for the constructive purposes. It is only in consequence of this previous sufficiency that operations have at all succeeded, it then merely requiring the induction of the necessary local circulatory and nervous afflux and cell action for its concentration

and appropriation. But as these operations are often attended with uncertainty and great difficulty, and even danger, the latter especially in spina bifida, they are objectionable. Hence it is highly desirable that some more efficient and less dangerous method should be devised for the purpose; and in imitation of the gentle and uniform process of nature, it would be advisable to excite this local afflux and action by milder extraneous measures, such as irritant applications, or even the moderate approximation of the tissues, separately or conjoined; and at the same time, to secure the certainty of the supply of the necessary calcareous matter, as before indicated, to administer the phosphate of lime, and to promote the activity of the assimilative functions by the appropriate means—great care, however, being exercised in such cases as spina bifida, to cause very gradual local effusion of the animal and deposition of the earthy matter, as any sudden or extensive modification might prove as disastrous as that resulting from the means so ineffectually and often fatally resorted to at present. The progression of the deposition and construction would possibly cause the absorption of the fluid usually existing in the sac connected with this latter malformation; but to promote the union more effectually, it might be necessary gradually to remove it by the acupuncture.

In other cases there is a more general derangement of the constructive and nutritive osseous processes, there being not only a deficiency of the necessary materials, and the calcareous especially, but also a partial or extensive modification or removal of that which has already been organized, giving rise to those conditions more particularly included under the head of atrophy. Of this there are two principal divisions, viz., simple and complicated. In the first, the most prominent affection, exhibiting derangement of both development and nutrition, is that known as rickets, in which there is not only insufficient and often irregular primary deposit of the calcareous matter especially, and to some extent subsequent absorption, but certain other abnormal deviations not so apparent, all of which, however, are often corrected by a spontaneous change effected in the system, particularly at certain periods, as at puberty. Yet as there is always attendant on its continuance a modification and destruction of the symmetrical proportions of the organism, interfering materially with the subsequent functions and duties of life, and occasionally even rendering existence a burthen, it becomes important to prevent such evils. In the accomplishment of this, as the deficiency of the calcareous materials is the most strikingly observable, it is obviously requisite to supply that which is absent or destroyed; hence the exhibition of phosphate of lime is strongly indicated, not only for this purpose, but for its additional properties of increasing organic development and functional energy. Still, however, the mere introduction of this substance into the economy will not fully correct the derangement, although, as shown by Dr. Beneke, it will undoubtedly prove highly useful, as generally the inefficient or deranged organic action is the direct consequence of diseased influence, demonstrated by the fact that this disorder has been cured by those remedies which do not usually contain lime, but possess the power to modify and correct

abnormal action, and promote healthy nutrition, assimilation especially. As no single known remedy possesses these properties in a higher degree than cod-liver oil, it will be desirable to aid the action of the former by the conjoined influence of the latter. Therefore as the phosphate of lime separately has proved very beneficial, and the cod-liver oil of itself in some instances curative in this affection, it is reasonable and just to infer that their combined influence would be still more efficient if not certainly successful in the greater proportion of cases, especially as they both not only moderate and rectify diseased action, but supply and increase the essential materials, and at the same time greatly promote the necessary organic and cell action for their appropriation.

Other cases, again, present somewhat similar characteristics, in which there is, however, more evident diseased action and nutritive lesion, the loss of the earthy matter being both actual and relative, and the animal matter often modified, and more directly dependent on undue absorption or disproportionate consumption and waste after development, the type of these being strikingly exhibited in malacosteon. In them, the most prominent remedies are those above mentioned, and their exhibition would be especially indicated not only to prevent the undue destruction of the osseous matter, but to re-supply the materials necessary for its restoration, correct the deranged action and re-excite the healthy nutritive processes. And to promote more effectually the action of these, it may be requisite, in some instances, to aid still further by other means, such as tonics and alteratives, as iron, iodine ; or both combined, as iodide of iron, &c., in conjunction with those therapeutic and hygienic measures so essential to the ultimate success of every treatment.

These remarks are also applicable to those other conditions dependent very frequently, though not exclusively, upon some general diathesis so often resulting from congenital or acquired dyscrasia, a very conspicuous one of which is fragilitas ossium. In this the proportion of earthy matter is relatively increased, while the animal tissue is degenerated and destroyed, yet there may be, from interstitial absorption, a general and actual loss of both components. In the prevention and correction of these, it becomes necessary to act upon similar general principles ; but as it, in common with the others, is sometimes dependent on, or complicated with, a syphilitic or other cachexia, or a malignant tendency or degradation of system, it is, and they are, in consequence often less amenable to treatment, the ultimate success in all such affections being, of course, proportionate to their simple or complicated character. Yet, even in these latter, it is confidently believed that the course herein indicated promises to prove much more successful than any other at present practised.

Philadelphia, April 6th, 1852.

THE ETHER DISCOVERY.

To the Editor of the Boston Medical and Surgical Journal.

Sir,—I perceive by the following paragraph in the Boston Daily Times, accredited to the Hartford Times, that the friends of Dr. Horace Wells still claim for him the ether discovery.

"A petition to Congress may be signed at F. A. Brown's, or E. T. Pease's, asking for justice to the wife of the true discoverer of ether or chloroform as a preventive of pain in surgical operations. Dr. Wells was, beyond all question, entitled to the honors and benefits of the discovery, and now that he is dead, others who learned from him should not be allowed to usurp his place, and reap the rich reward which belongs to his family."

The article which Dr. Horace Wells claimed to possess anæsthetic properties was *nitrous oxide*, commonly known as exhilarating gas, which Sir Humphrey Davy showed did not possess these qualities, some fifty years ago. Dr. Wells before his death wrote a letter, *doubting that ether possessed the properties claimed for it.* The letter was dated Hartford, Oct. 20, 1846, and was published in the Boston Medical and Surgical Journal April 28, 1847.

In the same Journal May 12, 1847, Dr. W. wrote.

"When I first administered the *nitrous oxide* for a surgical operation, I was astonished that the patient did not exert the muscular system, *as is generally the case* when taken merely for pleasure, and this proved to be the case in subsequent operations. (Signed) HORACE WELLS.

"*Hartford, May* 5, 1847."

There is other and abundant evidence, showing that Dr. Wells claimed nitrous oxide, and not ether, except as encroaching on his exhilarating gas.

In the London edition of the Researches Chemical and Philosophical, chiefly concerning nitrous oxide, by Humphrey Davy—published in the year 1800, page 464, Davy writes as follows: "During the last week in which I breathed it (nitrous oxide) uniformly, I imagined I had *increased sensibility of touch*; my fingers were pained by anything rough, and the toothache produced from slighter causes than usual. I was certainly more irritable, and felt more acutely from trifling circumstances." The claim of Dr. Wells is therefore simply ridiculous, and was very properly thrown out, on examination of his evidence both by the recent committee of Congress, and that of 1849, and likewise by the French Academy of Arts and Sciences. The two articles are entirely distinct in their elements and properties; the ether or oxide of ethyle producing in its pure state (not in the unsafe mixture called chloroform, which often produces asphyxia), insensibility to pain without danger to the patient. The nitrous oxide, or a compound of oxygen and nitrogen gases, in the proportion of an atom of each (see Fowne's Chemistry, page 105), produces intoxication or exhilaration but not nervous insensibility. From the "Comptes Rendus de l'Academie des Sciences," vol. xxiv., page 373, 1847, at the Session of Monday, March 1st, 1847, it appears that the letter of Dr. Horace Wells, of Hartford, Ct., was placed before the Academy, and was disposed of. The following language was made use of *after* Dr. Jackson and Mr. Morton's claims were before the Academy. "Guidé par diverses considerations, et entre autres, par celles que suggire l'observation des individus enivrés au moyen des liqueurs alcoholiques, je commengai des le mois de Novembre, 1844, à

faire des expériences sur moi même. Après inhalé le gaz (protoxide d'azote) et le vapeur d'ether sulphurique, je ne tardai pas a me convaincre que ces deux substances produisaient des effets identiques sur l'économie animale." I translate as follows—"Guided by various considerations, and among others by those suggested by the observation of individuals intoxicated by means of alcoholic liquors, I commenced from the month of November, 1844, to make experiments upon myself. After inhaling the gas (protoxide of nitrogen), exhilarating gas, and the vapor of sulphuric ether, I was not slow in convincing myself that these two substances produced identical effects on the animal economy."

Davy's account, given above, of the effects of exhilarating gas, is a sufficient refutation of this statement. The letter goes on to state as follows—" Jusqu'au mois de Fevrier, 1845, je pratiquai l'avulsion des dents à vingt-cinq malades sans qu'ils ressentissent de douleur, toutefois je fis surtout usage du gaz protoxyde d'azote, comme c'etant plus agréable à respirer que l'ether. La decouverte que j'ai faite ne consiste donc pas uniquement dans l'emploi de l'inhalation de l'ether, mais dans le principe même qui établit la possibilité de la production d'etat d'insensibilité, par l'usage de divers agens, tel que gaz protoxide d'azote, vapeur d'ether sulphurique, &c. Je produirai incessamment toutes les pièces qui etablissent, d'une maniere irrécusable, que cette decouverte m'est due." I translate as follows—Up to the month of February, 1845, I extracted the teeth of twenty-five patients without their feeling pain. I *always* made use of the gas protoxide of nitrogen (exhilarating gas), as being more agreeable to breathe than ether. The discovery which I have made does not alone consist in the employment of the inhalation of ether, but in the principle itself; which established the *possibility* of the production of insensibility by the use of various agents, such as the protoxide of nitrogen, vapor of sulphuric ether, &c. I will soon produce the documents which establish, in an undisputable manner, that this discovery is due to me.

" M. le Secretaire ajoute que c'est seulement lorsque M. Wells aura produit les pièces qu'il annonce, que sa réclamation pourra être soumise à l'examen d'une commission."

Mr. Secretary adds that it is only when Mr. Wells shall have produced the documents spoken of, that his claims could be examined by a commission.

The documents were afterwards produced, and the Academy decided that the nitrous oxide would not produce the effects alleged; which Mr. Wells also proved himself, both in New York and Boston.

After the remarks of the Secretary, the *savant* M. Elie de Beaumont, now a French Senator and member of the Council of State, and also of the Academy, remarked to that body as follows: " M. Elie de Beaumont fait remarqer que la date déja éloignée à laquelle remonte la réclamation tendroit à elle seule â en dimineur la valeur, du moins au point de vue des applications à la chirurgie. En effet, de 1844 à la fin de 1846, il s'est écoulé deux ans; pendant ce laps de temps, aucun chirurgien n'a appelé la vapeur d'éther à son aide; tandis que, dans les quatre mois que se sont écoulés depuis le mois de Novembre, 1846

époque à laquelle M. Jackson a commencé à s'occuper de l'application de son heureuse idée, des opérations ont été exécutées, sous l'influence de l'etherization, dans toutes les parties du monde civilise. Le *veritable bienfaiteur de l'humanité* paraît être ici bien évidement celui qui, le premier, a engagé un dentiste à assoyer d'extraire une dent à une personne placée sous l'influence de l'etat particulier que produit l'inhalation de la vapeur d'éther."

I translate as follows—M. Elie de Beaumont remarked that the distant date to which this reclamation extends, would tend in itself to diminish the value, at least as regards its application to surgery; from 1844 to the end of 1846, two years have passed, during which lapse of time no surgeon has called the vapor of ether to his assistance, while in the *four months* which have passed since the month of November, 1846, the epoch at which M. Jackson commenced to occupy himself with *his* happy idea, operations have been performed under the influence of etherization in all parts of the civilized world. *The true benefactor of humanity* appears here to be very evidently he who first engaged a dentist to attempt the extraction of a tooth from a person placed under the peculiar influence which is produced by the inhalation of ether.

The Journal of Agriculture of the 7th inst., published in this city, and edited by Prof. Mapes, Wm. S. King, and A. W. Dodge, holds the following language. "We hear with astonishment, that a Committee of the House of Representatives have reported in favor of allowing Dr. W. T. G. Morton, of Boston, a 'consideration' of $100,000 for his services in discovering the power of sulphuric hydric ether to render the human frame insensible to pain. To Massachusetts men, to the whole scientific world, and to the 'rest of mankind,' who know the standing and character of Charles T. Jackson, who claims to have made this discovery in 1842, and to have mentioned it to Drs. Channing and Bemis of Boston, who also swear to the same fact, the announcement appeared incredible; it seemed too truly ridiculous to be true. We sincerely hope the members of Congress will not stultify themselves by passing any such act, or making any such grant, as the one rumored and referred to. Dr. Jackson's fame belongs to his country, and is recognized by the civilized world; let then our country's guardians pause ere they stain a name that does honor to the land of his birth. In private life, also, Dr. Jackson has ever sustained a character above reproach; and of Dr. Morton we know nothing. It is, therefore, becoming in men to pause, before they attempt to fasten upon such a man as Dr. Jackson, the charge of pretending to an honor to which he had no right."

I will simply add that the claims of Dr. Charles T. Jackson, of this city, to this discovery, is sustained in a remonstrance to Congress against Morton's claims, signed by 145 of the first physicians and surgeons of Boston and vicinity, including a majority of the physicians and surgeons of the Massachusetts General Hospital, setting forth that the signers "believe, and ever have believed, that Dr. Jackson is the sole and veritable discoverer, and that any merit in others consists in taking the discovery after it was made by him, and subjecting it to additional employment."

H. A. H.

Boston, April, 1852.

ASPHYXIA FROM CARBONIC ACID GAS.

BY E. C. CROSS M.D., GUILFORD CENTRE, VT.

[Communicated for the Boston Medical and Surgical Journal.]

Was called Oct. 28th, hastily, to vist Miss E. S., a young lady of 17 years, who resided not more than 40 rods distant from my office. Found the room filled with neighbors, the windows raised, doors open, a vessel of burning charcoal in the room, and the patient insensible, breathless and pulseless. I immediately applied my ear to the chest, but could not detect any sound over the region of the heart or from the lungs; eyes partly closed, lips colorless, countenance cadaverous. In answer to my inquiries, I was informed that, since cold weather commenced, this young lady had often carried a kettle of burning charcoal to her room to keep it warm, taking the precaution to ventilate the room by raising one window two or three inches; that upon the present occasion, after conversing with a friend, who had called for an indefinite time, whilst stooping for something she had dropped, she fell insensible upon the floor, some ten or fifteen minutes previous to my seeing her. The neighbors immediately ran in and commenced sprinkling water in her face, &c.

The general appearance of the patient indicated her case to be hopeless, as those present said "she was already dead." Yet she was immediately placed upon a bed, a pair of common bellows were used to inflate the lungs, whilst one assistant proceeded to disrobe the upper part of the body, another to apply cold water to the chest, two others to apply friction smartly to the body, whilst I attempted to expel the air from her lungs by working her chest with my hands, endeavoring to establish artificial respiration. Our efforts were continued without remission for full one hour, when there was an effort at inspiration for the first time. Nearly another hour was passed in the same manner, and another effort to inspire was made; the eyes closed, and the lips soon became slightly tinged with red, and a slight pulsation could be felt over the carotid artery, but none at the temple or wrist. Gradually the eyes partly opened, the lips became colorless, the pulsation in the neck ceased, and we began to think "all was over." Our efforts to produce artificial respiration, the friction, and the application of ice cold water, were continued without interruption for full 3½ hours from the commencement, ere the third effort was made to breathe on the part of the patient; nor was there any other encouragement of success, during that time, than such as is named above. The patient now showed signs of returning animation. There was soon a motion in the arteries, occasional involuntary respiration, sighs, color gradually returned to the lips, &c.

In about six hours from the commencement we were enabled to discontinue our labors, the patient constantly catching for breath and groaning. She was gradually restored to consciousness and was left in charge of her friends, with a good prospect of convalescing.

Oct. 29th, about 10 hours afterwards, I found the patient with a small pulse, and 140 per minute, a cadaverous look, furred tongue,

troubled expression, and still catching for breath, with severe constriction across the chest. Prescribed a gentle laxative, with the occasional use of chloric ether and spr. lavender. In about two weeks she was convalescent.

The room in which this patient sat was very tight, and a window was raised a few inches below her head, so that she and her friend sat with impunity in an atmosphere of carbonic acid gas up to their very necks, until in stooping she immersed her head in the poison and became asphyxied. Probably the gas filled the room as high as the opened window, and, finding an outlet, went out upon the ground below. Her companion immediately opening the door, instead of stooping to raise the patient, probably saved both from death. I have seen one other case of poisoning from the same substance, the details of which would be less interesting than the above.

COMPOUND FLUID EXTRACT OF SENNA AND DANDELION.

BY EUGENE DUPUY, PHARMACEUTIST, NEW YORK CITY.

Senna (officinal),	two pounds.
Torrefied dandelion root	one pound.
Chamomile,	quarter of a pound.
Sugar,	twenty ounces.
Carbonate of potash or soda,	one ounce.
Oil of gaultheria,	half a drachm.
Alcohol,	two ounces.
Water,	half a gallon.

Mix the dry plants, previously reduced to a coarse powder, with the water holding the alkaline carbonate in solution; let the mixture stand twelve hours; introduce it in a percolator, and gradually pour in water until a gallon of liquid shall have passed; evaporate it to twenty ounces by means of a water bath, then add the sugar, filter, and make the addition of the alcoholic solution of gaultheria when cold. By following this process, I believe that a kind of saponification takes place, which allows of the more ready solution of the active principle of the senna in the aqueous vehicle, probably because chlorophylle being united to a dried essential oil, participating in the properties of resins, is rendered soluble, and the extractive portion being denuded of its resinoid covering, is more readily extracted by the percolating liquid. I make use of a percolator possessed of a convenient hydraulic power; it has rendered readily, within thirty hours, a highly saturated liquid, containing in a gallon all the soluble principles of this extract. Ordinary percolators will answer also; but the ingredients needing to be more loosely packed, do not yield so fully or so readily. The addition of torrefied dandelion root is intended to give to this fluid extract some greater value on account of its peculiar action on the hepatic system. I employ in preference the German chamomile (Camomila vulgaris), because of its pleasant aroma and its carminative properties, joined to a bitter principle, which seems to increase the purgative effect of the senna.

This extract has become a favorite anti-bilious purgative with many of our practitioners, who, some of them at least, have used it with success with children, who can take it readily, as well as for adults, where an anti-bilious purgative is desirable, seldom producing pain or nausea, and not liable to produce constipation.—*New York Jour. of Pharmacy.*

CASE OF MECHANICAL OBSTRUCTION OF THE BOWELS.

BY J. B. GARDEN, M.D., WYLLIESBURG, VA.

The novelty of the following case I hope will be sufficient apology for insertion in your periodical, and at the same time it may institute a more minute search after mechanical causes in constipation than is generally supposed to exist.

October 7th.—I was requested to visit a negro man, aged about 25 years, who had been for five days laboring under the ordinary symptoms of epidemic dysentery. Tormina and tenesmus, with scanty discharges of a mucous character, sometimes tinged with blood, frequent inclination to stool, thirst, loss of appetite, and other symptoms indicating a febrile state of the system. There was no vomiting or nausea throughout the whole course of the disease.

These symptoms persisted with little or no abatement until the tenth day of his illness, with entire constipation up to this time, in despite of all our endeavors to produce a discharge from the intestinal canal. Strangury was a symptom in his case which we witnessed in almost all the bad cases of the epidemic of this summer and fall. It was promptly relieved by the warm bath and an anodyne administered about fifteen minutes before entering the bath.

We commenced our treatment by the administration of a purgative we are in the habit of using in dysentery—a combination of castor oil, solution of carbonate of potash, tinct. opium and the essence of peppermint—for several days. This seemed to have no effect on the peristaltic action of the bowels, and more active purgatives were substituted, placing our chief reliance on the specification of mercury, in the dose of three grains of calomel united with one grain of opium every three hours. This treatment we concluded to persevere in, whatever other medication might be thought advisable, until ptyalism was induced. Injections of the solution of nitrate of silver were freely used to allay irritability of the lower bowel, and prevent disorganization of the mucous membrane, as the frequent discharges indicated a highly irritated state of that organ, being fluid, of a dark appearance and very offensive odor.

Cathartic enemata, warm bath, frictions over the abdomen and cathartic medicines by the mouth had no other perceptible effect than to allay the tormina and tenesmus for a while, and produce loud roarings and flatulence. Obstruction of the bowels from some mechanical cause evidently gave rise to the great distress and sufferings of our patient, for which we sought in vain, until it was deemed necessary to distend them with warm water. This was accordingly attempted on the fifth day of our attendance, but the obstacle which prevented the passage

of the feces downwards, and of the rectum tube upwards, lay about two inches from the verge of the anus. The rectum with its pouches was enormously distended with about a pint of water-melon seeds. It gave rise to such excruciating pain on endeavoring to dislodge them by the gentlest means, that we abandoned all hope of giving our patient relief without the anæsthetic agency of chloroform.

12th. Assisted by my father, Dr. T. J. Garden, who now saw him for the first time, I proceeded to administer chloroform, and in about five minutes profound anæsthesia was induced. The quantity used was near ʒ iij. The rectum was then readily evacuated of its burden with entire relief to the patient, and free vent given to the hardened scybala which had been so long impacted in the colon. The inflammation which followed was readily overcome by appropriate treatment, and the case was dismissed in a few days as convalescent.—*The Stethoscope and Virginia Medical Gazette.*

THE BOSTON MEDICAL AND SURGICAL JOURNAL.

BOSTON, APRIL 28, 1852.

Medical Society of New York Transactions.—In the Empire State, the general Medical Society sends forth an annual report of its transactions, of a voluminous character, which, contrary to the usage in other places, is published by the State. It is a regular communication, addressed to the Speaker of the Assembly, and of course it is published as a State document. This course relieves the members of the Medical Society from taxing their own pockets; and though it costs the people a round sum, no one feels it, and consequently it is an excellent arrangement. A variety of instructive matter is interspersed through the 160 octavo pages of the present number, which is creditable to the sources from which it emanates. Dr. Armsby's address before the Albany County Society is published at length, embracing a succinct history of French and English hospitals. It would seem that the Society does with less money than corporate bodies ordinarily spend. It must be that the members pay for their own dinners at the annual meeting. It appears from a table of figures, that the income of the Society was only $83,00 in 1851, out of which a moiety has been expended, leaving in the treasurer's hands, $74,27. A voluntary subscription prize fund was raised, honorable to the enterprise of the County Societies. The following resolution was passed—

"Whereas, there is reason to believe that typhus or typhoid fever of a contagious and fatal character has in many cases been diffused over various parts of the State by the emigrants, and by their foul clothing, therefore:

"Resolved, that the Hon. the Legislature be requested to take effectual measures for the prevention of this evil, especially for the thorough purification of the clothing of the sick, and of others arriving from emigrant vessels."

Veterinary Medicine.—Some progress is making in Boston, in this important branch of business. Gentlemen of education do not think it

beneath them to study the diseases of animals. All will allow that it is an eminently humane pursuit; and when veterinary practice is based on scientific principles, it becomes at once a dignified profession. Mr. Wood, the writer of an article two weeks since, has favored the Journal with another on scarlatina of the horse, drawn up with peculiar care. It evinces a thorough familiarity with the anatomy of that noble animal, and the diseases to which he is incident.

Medical College of South Carolina.—The large attendance of students during the past lecture season, at this College, must have been gratifying to the Faculty, who are an able body of instructers, and have succeeded in raising the reputation of the institution to a commanding position. Two hundred and twelve students indicate a flourishing state and a growing renown. Prof. Agassiz's name appears as a permanent member of the Faculty, in the chair of Comparative Anatomy, with the distinct understanding that the expenses of the student are not to be increased by the addition. One hundred and three were graduated recently with the degree of doctor of medicine. The premium of a silver cup was awarded to Dr. T. Gaillard Thomas, of Charleston, for an excellent paper on cod-liver oil. Prof. Agassiz was complimented by the class. From the stress laid on the value of the study of comparative anatomy, in the circular of the college, it may be hoped that this too-much-neglected science is destined to be held in better estimation for the future, especially in that school. Prof. Agassiz states that he has decided to complete a work—a text-book of Comparative Anatomy—for the use of American students.

Improved Syringes.—A medical practitioner, of Boston, has devised an improvement upon the various kinds of syringes, that is said to be of peculiar value, the particulars of which will at a proper time be given by the inventor. He is confident that a principle of great utility has been applied, and a considerable outlay of capital has been made in the construction of machinery, and the preparations for manufacturing extensively. Druggists know very well that the annual sales of these simple instruments, even in a single city, amount to a vast sum. The idea, therefore, of supplying every market, even to the West India islands and California, pre-supposes enterprise and energy, independent of money.

Prosecuting Surgeons.—Massachusetts is in a fair way of taking the lead in the persecution of surgeons. The State of New York, greatly distinguished in that way, will soon be lost sight of in the more active career of this ancient commonwealth. One case after another shows that the best operators in New England expose themselves to the hazard of a vexatious lawsuit, in every instance where the case is not in all respects satisfactory to the patient and his friends.

The last trial for mal-practice occurred at Greenfield. The defendant, a practitioner of surgery at Northfield, Mass., was prosecuted for alleged unskilfulness and negligence in the treatment of the plaintiff's broken arm. The damages were laid at the moderate sum of $4,000! From all we can gather, there was a well-grounded hope of recovering enough of he surgeon, to make himself and family comfortable for the remainder of life, but by the good sense of the jury, the plaintiff recovered but *one dollar*,

In all the previous trials, the juries have seemed to act with a determination to cripple the profession. Why this feeling should exist in the community, has not been explained. Some of the most worthless men in the State, who have been kindly and skilfully attended, who neither had the means of paying, or the moral honesty to do so if they had, in repeated instances have made a fractured bone the stepping-stone to personal independence, without the least regard to the fair fame of their medical attendants. Dr. Stratton, in the instance alluded to, fortunately has not apparently suffered in his property beyond the expenses of a defence. It is impossible to predict whose turn may come next; but this much is certain, there is a cherished disposition among certain classes of persons to ruin every surgical practitioner, if possible, by seizing his property. A pretext of mal-practice enables them to lay an attachment, and by the protracted method of conducting legal investigations in New England, the paying of witnesses, counsel, giving attendance on courts, loss of time from business, and innumerable personal expenses growing out of an unrighteous suit at law, the ruin of the defendant's professional influence generally follows, even if his last dollar is not taken.

American Medical Association.—Notwithstanding the delay in publishing the names of delegates and the action of associations throughout the country in regard to the ensuing meeting, it is gratifying to believe that a proper degree of enthusiasm is exhibited by gentlemen of the profession generally, which we hope will ensure a full attendance. Richmond is an accessible point, the inhabitants are hospitable, and the softness of a May morning in that part of Virginia will almost make some of the extreme northern members envious. Whatever may be communicated by attending members, during the session, to apprize those remaining at home of the progress of the Association, will be inserted in our pages, and read with interest. Some excellent reports are preparing, and it is safe to predict that the transactions of this medical congress will demonstrate the progress of medical science in America.

Deaths by Chloroform.—Practitioners should either resort to pure sulphuric ether or chloric ether, according to the opinion of Dr. Hayes, the chemist. The tincture of chloroform is *the* dangerous article. It is said that one of the purest agents for anæsthetic purposes is manufactured by Messrs. Philbrick, Carpenter & Co., Washington street, Boston. Dr. Warren speaks highly of it.

Three Female Breasts.—A lady, belonging to Bangor, Me., assures us that a neighbor of hers has three well-developed mammæ—and further, that while rearing her children, they were nursed, indifferently, on all three. The extra organ is located on the line between the two natural ones, over the point of the sternum. As this is an unusual anomaly, perhaps some of the physicians in that city will favor the Journal with the particulars.

Comparative Value of Cod-liver Oil, and Fish Oil mixed with Iodine.—Dr. Champouillon, professor at the Army Medical School of Val de Grace, has just laid before the Academy of Medicine the result of the

comparative experiments he has made upon phthisical patients with cod-liver oil, and simple fish oil mixed with iodine. Dr. Champouillon gave the cod-liver oil to 120 patients laboring under phthisis. Fifty-one were in the first stage; and of these, twenty-four were benefited, and none died. Thirty-seven were in the second stage; of these, nine recovered, and three died. Fourteen were in the third stage; and here six recoveries and four deaths took place. The author gave the iodated oil to seventy-five patients in different stages of phthisis: no improvement took place in any case, and in several it was noticed that the remedy did harm.

Bristol District Medical Society.—The annual meeting of the Bristol District Medical Society was held at Taunton, March 10, the Vice President, Dr. Hatch, in the chair.

A communication from Dr. Gardner, President of the Society, was read, declining a re-election.

A committee of three were chosen to nominate officers for the ensuing year, who afterwards reported the names of the following gentlemen, who were unanimously elected:

President, Dr. Caleb Swan, of Easton. *Vice President*, Dr. Joseph H. Hatch, of Attleborough. *Secretary and Treasurer*, Thaddeus Phelps, of Attleboro'. *Librarians*, Phineas Savery, Attleboro'; James B. Dean, Taunton. *Counsellors*, Benoni Carpenter, Pawtucket; Ira Sampson, North Dighton; Charles Howe, Squawbetty. *Censors*, Phineas Savery, Attleboro'; M. R. Randall, Rehoboth; Dan King, James B. Dean and J. D. Nichols, Taunton.

A communication was received and read, from the Suffolk District Society, in relation to the *Jenner Monument*. *Voted*, that it be laid upon the table, as the communication was not received until too late for action.

Voted, to elect three delegates to represent this Society in the National Convention, to be held in Richmond, Va., in May next. Drs. Johnson Gardner, of Vue de l'Eau, Caleb Swan, of South Easton, and Benoni Carpenter, of Pawtucket, were chosen.

At 11½ o'clock, Dr. M. R. Randall, of Rehoboth, read the annual address. Subject, "*Quackery.*"

Voted, that the thanks of the Society be given to Dr. Randall, for his able, interesting and truthful address.

Dr. Howe offered the following resolution, which was unanimously adopted:

Resolved, that it is the duty of the members of this Society to oppose, in all honorable and proper ways, *every* detached system of practice of medicine, and that if there are now any belonging to the Society who cannot conscientiously do this, it is their duty to withdraw.

Dr. B. Carpenter offered the following resolution, which was adopted:

Resolved, that a Committee of three be appointed to form a code of Medical Ethics, and report at the next meeting of this Society.

Drs. B. Carpenter, Swan and Howe were chosen that Committee.

Question for discussion at the next meeting:—"Is Vaccination as sure a preventive of Smallpox, now, as it was twenty years ago?"

Dr. Savery, of Attleboro', was appointed to read the dissertation at the next meeting. Dr. Swan, substitute.

Use of Diluted Pyroligneous Acid as a Gargle.—Prof. Evans, of Rush Medical College, Chicago, writes as follows, in the North Western

Medical Journal. "I have for several years been using diluted pyroligneous acid as a gargle in cases of inflammation of the fauces and tonsils with better success than any other article that I have prescribed. I put a teaspoonful of the acid obtained from the shops into a wine-glass of water, and directed the patient to gargle the throat frequently with it.

"In the sore throat caused by exposure, so common throughout the country, it generally relieves the soreness and stiffness felt in swallowing very promptly.

"In chronic inflammation, with or without ulceration of the throat, I have found it a very valuable remedy.

"In the sore throat of scarlatina it has generally afforded a very prompt amelioration of this symptom of the disease.

"In several cases of habitual tonsillitis, by using this gargle freely at the commencement of the disease, I have been able to arrest the prog of the inflammation and secure a resolution.

"Its use is not unpleasant; it is safe, even if used for hours continuously, and has an additional advantage in removing the fœtor from the breath."

Medical Miscellany.—A thorn has been extracted from an elderly lady's elbow, at Covington, Ky., which had been there 35 years.—The quantity of opium for home consumption, in the United States, in 1850, was 42,334 lbs.; and in 1851, 50,368 lbs. Its use is vastly increasing. Very many, not suspected, are in the daily use of it. Ladies are reputed to be large consumers, as they are also of chloroform.—Mrs. Huldah Sparling died recently at Oswego, N. Y., at the age of 110.—Dr. Noble, of Port Huron, Michigan, in writing to a medical gentleman of Boston, mentions incidentally that he lost his wife two years ago, from inhalation of chloroform. Mrs. Elizabeth Eaton recently died in Georgia, from the same cause, in child-bed.—Dr. Durfee, of Fall River, has been prosecuted for slander, and damages laid at $20,000, say the papers.—Dr. O. H. Taylor, of Camden, is president of the New Jersey Medical Society.—Some of the papers state that 484 medical students were graduated at Philadelphia the present season. Half that number would be sufficiently alarming to those already in business.—Yellow fever is again raging at Rio Janeiro.

Erratum.—In last week's Journal, page 239, line 20, the word "reasons" should have been printed *answers*. Subscribers are requested to make the alteration with a pen in their copies.

To Correspondents.—The following papers are on hand:—Toxicological Applications of Nitrous Oxide; Carbo-Ligni as a Therapeutic Agent; Scarlatina in the Horse; Case of Tape-Worm.

Died,—At Salisbury, Conn., Dr. Ashbel Humphrey, 72.—At Petersburg, Va., Dr. Durken, a distinguished physician.

Deaths in Boston—for the week ending Saturday noon, April 24, 70.—Males, 30—females, 40. Disease of bowels, 1—inflammation of bowels, 1—consumption, 18—convulsions, 3—catarrh, 1—croup, 6—dysentery, 1—dropsy, 1—dropsy of brain, 2—drowned, 1—erysipelas, 1—exhaustion, 1—typhus fever, 2—typhoid fever, 2—scarlet fever, 3—hooping cough, 2—infantile, 3—disease of liver, 1—inflammation of lungs, 5—congestion of lungs, 1—marasmus, 2—measles, 2—palsy, 1—puerperal, 1—pleurisy, 1—rheumatism, 2—disease of spine, 1—teething, 3—smallpox, 1.

Under 5 years, 31—between 5 and 20 years, 8—between 20 and 40 years, 19—between 40 and 60 years, 10—over 60 years, 2. Americans, 26; foreigners and children of foreigners, 44. The above includes 5 deaths at the City institutions.

Charcoal Cushions for Deodorization.—A. S——, a patient under my care in the Hackney Union Infirmary, has for some time "passed every thing under her," and thereby become a nuisance and cause of complaint to the other patients in the ward. Eleven days ago, I adopted the plan of placing beneath her a calico bag two feet square, partially filled with Irish peat-charcoal, so as to form a sort of cushion and absorbing medium. It has had the happy effect — which continues even now, without any necessity for changing the charcoal — of completely neutralizing all unpleasant odor; and if the bed becomes partially wet, all the offensive ingredients are absorbed and neutralized by the charcoal, which thus is a most simple means of remedying a great nuisance, and one that requires the most strict attention at best to prevent; and that attention is often difficult, and always expensive, to procure. In cases of incontinence of urine particularly, and indeed all attended with fœtid discharges, cancer, compound fractures, &c., this plan, or some modification of it, might be adopted with advantage. I have been informed that some of the same material has been placed in the urinals of the South-Western Railway, with equally good results, in the prevention of unpleasant odor; and that even after it has been unchanged for some weeks, the fluid that percolates has been found, by chemical analysis, to contain little or no trace of the organic or saline products of urine. The fact induced me to try it as above. An argument in favor of its adoption in hospitals and lunatic asylums is, that the peat, after its deodorizing properties are exhausted, becomes more valuable for the purpose of manure, so that its use is without expense.—*Mr. Howell, in London Lancet and Dublin Medical Press.*

Compression of the Carotid Artery for the Relief of Pain in the Trunk or Limbs.—Dr. Turck, of Plombieres, has published in the *Revue Médico-Chirurgicale* a series of cases where great relief was obtained by compressing, for a longer or shorter time, one or both carotids (or rather pneumogastric nerves). Severe colic, without diarrhœa, of fifteen years' standing, incipient phthisis, gastralgia, sciatica, &c. &c., were temporarily benefited by this compression. Dr. Turck was induced to try this peculiar therapeutical means, as it had, according to Parry, Liston, Preston, in England, and Bland, Trousseau, &c. &c., in France, rendered good service in facial neuralgia.—*London Lancet.*

Oil of Pitch in Eczema.—The French medical periodicals have of late spoken very highly of the efficacy of the oil of pitch (huile de Cade) in the treatment of eczema. Indeed, M. Devergie, physician to the "Hopital St. Louis" where diseases of the skin are especially treated, advocated the oil several years ago, and has lately taken an opportunity of stating that this "huile de Cade" should be preferred to the empyreumatic oil obtained in the production of coal-gas, which has been highly eulogized by M. Lafond Gouzi. Dr. Neligan, in his work on Materia Medica, states that the "huile de Cade" has been used on the continent in obstinate cases of herpes, lichen, and eczema, but observes that the term "huile de Cade" (oleum cadinum) has been restricted by some French pharmacologists to a tarry oil obtained by the dry distillation of the wood of the iuniperus oxycedrus.—*Ib.*